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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,209	01/20/2004	Young-Soo Han	CHAES7.003AUS	2517
20995	7590	01/13/2006	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			JACKSON, ANDRE L	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			3677	

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/762,209

Applicant(s)

HAN ET AL.

Examiner

Andre' L. Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-36 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-10,16-25,27-29,31 and 32 is/are rejected.
- 7) ☒ Claim(s) 3,5,11-15,26 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) .<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)               |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*DETAILED ACTION*

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 31, 2005 has been entered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States:

Claims 1, 2, 4, 6-10, 16-20, 23-25, 27-29, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 6, 115,886 to Fujita. Fujita discloses a hand held electronic apparatus (10) comprising;

a first unit (11); a second unit (12), wherein at least one of the first and second units comprises a display, and wherein at least one of the first and second units comprises an information input device; a hinge device interconnecting the first and second units such that the first and second units can rotate relative to the hinge device, the hinge device comprising;

a housing (11b, 12b) located between and movable relative to the first and second units;  
a first rotating member (1) coupled to the first unit and rotatable about the first rotation axis with

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respect to the housing; a second rotating member (1) coupled to the second unit and rotatable about the second rotation axis with respect to the housing;

a first linearly moving member (8) cooperating with the first rotating member and linearly movable with respect the housing; a second linearly moving member (8) cooperating with the second rotating member and linearly movable with respect the housing; a first resilient member (9) urging the first linearly moving member against the first rotating member; and a second resilient member (9) urging the second linearly moving member against the second rotating member (Fig. 5).

As to claims 2, 4, 9, 10, 18 and 19, the first and second rotating member are independently and engagedly rotated with the first unit and second unit respectively, while the first and second linearly moving members are independently moved during rotation of the first and second rotating members respectively.

As to claims 6-8, the first and second rotating members each include a cam member (6) and the first and second linearly moving members each include a cam follower member (8b) cooperating with the respective cam member of the rotating members. The respective cam members include upward and downward slanting surfaces as seen in Fig. 3. The cam member further defines first and second insertion grooves (between cam surfaces 6a) downwardly slanting into which a respective cam follower member can be inserted thereto, and a horizontal surface (Fig. 3). As seen in Fig. 11, at a foot of the fixing groove a horizontal surface is contiguous at the fixing groove, wherein stoppers (11a) having grooves at both ends of the cam member prevent movement of a respective cam follower member out of engagement thereof.

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As to claims 16, 17 and 20, Fujita further discloses that the first and second rotating members define protrusion portions or rod ends (4) and the first and second linearly moving members include a groove (8a) defining a track into which the protrusion portions can be inserted and guided therewith, wherein the first and second linearly moving members and the first and second resilient members are fitted around the rod ends.

As to claims 24, 25, 27, 28 and 32, the housing of Fujita is formed of two parts or portions of each the first and second units respectively, which encloses the first and second linearly moving members and first and second rotating members in side-by-side relationship.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita in view of USPN 5732331 to Harms. Although Fujita discloses a hinge device useable with a small electronic apparatus, Fujita does not disclose or suggest that the housing further includes passages through which a circuit wire passes connecting the first and second units as claimed. Harms teaches a portable device (10) comprising a first main unit (12) and a second flip unit (14) interconnected via a hinge (30). The hinge comprises a hinge housing (32, 34, 36) defining passage openings through which a circuit wire (76) electronically connects the units together while the hinge allows the second flip unit to be easily detached and reattached from and with

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the main unit, decreasing possibility of damage of the electrical connecting parts when rotated.

Therefore, it would have been obvious to one having ordinary skill in the art to modify the electronic apparatus of Fujita to incorporate the portable device of Harms to provide an improved electronic device comprising an enhanced mechanical and electronic hinge connection defining a hinge housing through which a circuit wire electronically connects the units together while the hinge allows the second flip unit to be easily detached and reattached, decreasing a possibility of damage of the electrical connecting parts when rotated or accidentally dropped.

***Allowable Subject Matter***

Claims 3, 5, 11-15, 26 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 33-36 are allowed over the prior art made of record.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to disclose or suggest the specific arrangement of the combination of structural limitations as set forth in applicant's claims above. In particular the prior art fails to disclose or suggest a hinge unit including a housing. A first rotating member coupled to a first unit and rotatable about a first rotation axis with respect to the housing, a second rotating member coupled to a second unit and rotatable about a second rotation axis with respect to the housing. Further, a first linearly moving member cooperates with the first rotating member and linearly movable with respect to the housing and a second linearly moving member cooperating with the second rotating member and linearly movable with respect to the housing.

A first resilient member urging the first linearly moving member against the first rotating member and a second resilient member urging the second linearly moving member against the second rotating member wherein the first and second rotation axes extend side-by-side and are substantially parallel with respect to one another. None of the prior art references disclose or suggest the specific arrangement as claimed whether taken alone or used in combination thereof.

***Response to Applicant's Arguments***

Applicant's arguments filed in the Amendment of October 31, 2005, with respect to the rejection(s) of claim(s) 1, 2, 4, 6-10 and 16-23 over Fujita have been fully considered and are not persuasive. In particular, applicant asserts neither Fujita nor Harms disclose every element of applicants' claims, and therefore cannot be considered as an anticipatory reference under 35 U.S.C. 102(b). Applicant states Fujita does not teach the claimed feature that the housing of the hinge device is movable relative to both the first and second units or a housing located between the first second units as claimed. Here, the Examiner disagrees and believes the openings or holes **11b**, **12b** form a two-part housing disposed at a distal end of the first and second units **11**, **12** respectively of Fujita's electronic apparatus constituting a housing interpreted broadly, regardless if the housing itself is an integral part or formed within a portion of the first and second units. Since this two-part housing referred to by the Examiner extends between a major contact surface of first and second units (proximal end), the housing is considered to be between, as further evidenced by Fig. 6 of Fujita. Thus, the Examiner contends Fujita discloses a housing located between the first and second units.

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As to applicant's argument pertaining to the motion of the housing relative to first and second units is germane because it has been held that the recitation an element is "adapted to" or "capable of" performing a function is not a positive limitation but only requires the ability to se perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. Therefore, the recited limitation "a housing movable relative to both the first and second units" is not a positive limitation and is not given patentable significance since Fujita satisfies the structural requirement of a housing, which is capable of the intended function.

Therefore, for the reasoning above, the rejections of Fujita and Fujita in view of Harms are maintained. Accordingly, claims 1, 2, 4, 6-10, 16-20, 23-25, 27-29, 31 and 32 are found to be unpatentable over the prior art of record. Claims 33-36 are allowed over the prior art of record and claims 3, 5, 11-15, 26 and 30 are objected to.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' L. Jackson whose telephone number is (571) 272-7067. The examiner can normally be reached on Mon. - Fri. (9:30 am - 6 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

André L. Jackson  
Patent Examiner  
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ALJ

  
**ROBERT J. SANDY**  
**PRIMARY EXAMINER**